

US 20140200397A1

(19) United States

(12) Patent Application Publication RAMAN et al.

(54) METHOD AND APPARATUS FOR EXTERNAL STABILIZATION OF THE HEART

(71) Applicant: MARDIL, INC., Plymouth, MN (US)

(72) Inventors: **JaiShankar RAMAN**, Chicago, IL (US); **P. Sriramo Rao**, San Diego, CA

(US)

(73) Assignee: MARDIL, INC., Plymouth, MN (US)

(21) Appl. No.: 14/216,928

(22) Filed: Mar. 17, 2014

Related U.S. Application Data

(63) Continuation of application No. 13/367,265, filed on Feb. 6, 2012, now Pat. No. 8,715,160, which is a continuation of application No. 11/637,286, filed on Dec. 12, 2006, now Pat. No. 8,128,553, which is a continuation of application No. 10/796,580, filed on Mar. 8, 2004, now Pat. No. 7,381,182, which is a continuation of application No. 10/236,640, filed on Sep. 6, 2002, now Pat. No. 6,716,158.

(10) Pub. No.: US 2014/0200397 A1

(43) **Pub. Date:** Jul. 17, 2014

Provisional application No. 60/318,172, filed on Sep.

Publication Classification

(51) **Int. Cl.** *A61F 2/24* (2006.01)

(60)

7, 2001.

(57) ABSTRACT

The present disclosure is directed to an external cardiac basal annuloplasty system (ECBAS or BACE-System: basal annuloplasty of the cardia externally) and methods for treatment of regurgitation of mitral and tricuspid valves. The BACE-System provides the ability to correct leakage of regurgitation of the valves with or without the use of cardiopulmonary bypass, particularly when the condition is related to dilation of the base of the heart. This ECBAS invention can be applied to the base of the heart epicardially, either to prevent further dilation or to actively reduce the size of the base of the heart.

